

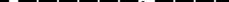
■ GenAI for Developers – JavaScript Batch

■ Note

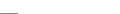
- JS
 - 1 Full Stack TODO App JavaScript

■ Course Overview

course Large Language Models (LLMs) Generative AI deep dive

- Focus: Practical & Project-based learning
 - Mathematics  , AI Tech Stack  Applications/Products build 

■ What You Will Learn

- Introduction to LLM & Generative AI – Fundamentals of LLMs
 - AI Agents & Agentic Workflows – Intelligent, autonomous agents 
 - Building Chat Applications – LangChain  Chatbot 
 - Chat over Large Documents – Qdrant, PGVector, Pinecone  use
 - Retrieval-Augmented Generation (RAG) – Real-time info retrieval
 - Context-Aware AI Applications – Contextual intelligent systems
 - Memory-Aware AI Agents – Qdrant DB  Neo4j Graph 
 - Document-to-Graph & Embeddings – Data  Graph-based 
 - Multi-Modal LLM Applications – Text, Image, Audio integration
 - Security & Guardrails – Self-hosted models (Llama-3, Gemma)
 - AI Agent Orchestration with LangGraph
 - Checkpointing in LangGraph – Fault tolerance pipelines
 - Human-in-the-Loop Interruptions – Human oversight
 - Tool Binding & API Calling – AI Agents → External Tools
 - Autonomous vs Controlled Workflows
 - MCP Servers – AI microservices deploy 
 - Guardrails for AI Models – Prompt filtering, PII detection
 - Model Fine-Tuning – Custom LLM training
 - LLM as a Judge Technique – AI  AI  evaluate 
 - Deployment on AWS – Scalable Cloud Hosting
 - Cypher Query Context Retrieval – Neo4j + LLM Integration

Tech Stack

- Programming: JavaScript / TypeScript
 - LLM Models: OpenAI, DeepSeek, Claude
 - Frameworks: LangChain.js, LangGraph.js, LangSmith
 - Tracing & Monitoring: Langfuse (Docker)
 - Memory & Vector Stores: Qdrant DB, Pinecone, Vector Embeddings
 - Infrastructure: MCP Server, Neo4j Graph DB, AWS

■ Learning Outcomes

- Frameworks → LangChain, LangGraph ■■■ mastery
 - Databases → Qdrant, Neo4j, Pinecone use ■■■■
 - Models → OpenAI, Gemini, Llama-3, Gemma
 - Infrastructure → AWS, Docker, LangSmith, Langfuse

■ Hands-On Projects

- AI Persona Maker – Chatbot (talks like Piyush Garg & Hitesh)
 - AI-Powered CLI Cursor – CLI based intelligent coding assistant
 - Voice Powered AI Girlfriend – Voice-based chatbot (for demo use)

- Voice-Powered Vibe Coder – Example: “Hey AI, build a TODO App in React”
- AI-Powered Website Bot – AI-driven website content interaction